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## THE BULLETIN OF ZOOLOGICAL **NOMENCLATURE**

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### THE INTERNATIONAL COMMISSION ON **ZOOLOGICAL NOMENCLATURE**

#### Edited by

#### FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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28th September, 1951

## NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

**1.** The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* **4**: 51–56, 57–59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* **5**: 5–13, 131).

## (a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

Notice is hereby given that normally the International Commission will start to vote upon applications published in the Bulletin of Zoological Nomenclature on the expiry of a period of six calendar months from the date of publication in the Bulletin of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (vol. 6, Part 2) of the Bulletin is accordingly invited to do so, in writing, to the Secretary to the Commission as quickly as possible and in any case in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

## (b) Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its plenary powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following names:—

(1) Laternaria Linnaeus, 1764, proposed suppression of, Fulgora Linnaeus, 1767, proposed designation of type species for (Class Insecta, Order Hemiptera) (Z.N.(S.)162).

(2) Geotrupes Latreille, 1796 (Class Insecta, Order Coleoptera), proposed

designation of type species for (Z.N.(S.)338).

(3) Lipeurus, Colpocephalum, Gyropus, all of Nitzsch, 1818 (Class Insecta, Order Mallophaga), proposed designation of type species for (Z.N.(S.)343).

(4) Eureum Nitzsch, 1818 (Class Insecta, Order Mallophaga), proposed

designation of type species for (Z.N.(S.)532).

2. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, Bull. zool. Nomencl. 4: 56), corresponding Notices have been sent to the journals "Nature" and "Science."

#### FRANCIS HEMMING

Secretary to the International Commission on Zoological Nomenclature

Secretariat of the International Commission on Zoological Nomenclature, 28, Park Village East, Regent's Park, London, N.W.1, England. 28th September, 1951.

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A TYPE SPECIES FOR THE GENUS "FULGORA" LINNAEUS, 1767, AND TO SUPPRESS THE GENERIC NAME "LATERNARIA" LINNAEUS, 1764 (CLASS INSECTA, ORDER HEMIPTERA)

By R. G. FENNAH

(Imperial College of Tropical Agricultural, Trinidad)

#### (Commission's reference Z.N.(S.)162)

The object of the present application is to secure a legal foundation for the use of the generic name *Fulgora* Linnaeus, 1767, in its currently accepted sense. Two distinct problems are involved; these are dealt with separately as Cases 1 and 2 respectively.

#### Case 1

Aim of present application: The aim of the present application is to secure that the type species of Fulgora Linnaeus, 1767, shall be Cicada laternaria Linnaeus, 1758. The relevant references are:—

- (a) The generic name Fulgora Linnaeus was first published in 1767, Syst. Nat. (ed. 12) 1 (2): 703, no. 1.
- (b) Claims have been advanced on behalf of each of the following authors to be regarded as the author by whom the type species of *Fulgora* Linnaeus was first either designated or selected:—
  - (i) Linnaeus, 1767, Syst. Nat. (ed.12 1 (2): 703: type species designated under Rule (f) in Article 30: Cicada laternaria Linnaeus, 1758; Syst. Nat. (ed. 10) 1: 434, no. 1;
  - (ii) Sulzer, 1776, Dr. Sulzers abgek. Gesch. Ins.: 85, Tab. 9, fig. 5: type species selected under Rule (g) in Article 30: Fulgora europaea Linnaeus, 1767, Syst. Nat. (ed. 12) 1 (2): 704, no. 9;
  - (iii) Latreille, 1810, Consid. gén. Crust. Arach. Ins.: 434: type species selected under Rule (g) in Article 30, as interpreted by Opinions 11 and 136: Fulgora europaea Fabricius, 1775, Syst. Ent.: 674 (=Fulgora europaea Linnaeus, 1767).

Discussion of the case: The generic name Fulgora was published with a description but with no type designation. The following nine nominal species were placed in this genus: laternaria; diadema; candelaria; phosphorea; noctivida; lucernaria; flammea; truncata; europaea. Two of these species, namely F. laternaria and F. candelaria, by evidence of identical description and references, belong to the genus Laternaria Linnaeus, 1764 (Mus. Lud. Ulr.: 152), and were the only two species included in that genus. The former is the type species of Laternaria by absolute tautonymy.

The relation of the name Fulgora Linnaeus, 1767, to Laternaria Linnaeus, 1764, must be either that of a nomen novum for a supposedly invalid Laternaria, or a simple substitution, as it cannot be a restriction of Laternaria, since it includes all the species originally placed in that genus. In his treatment of

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Cicada in 1764 (which there follows immediately after the genus Laternaria), Linnaeus did not include a single one of the species which three years later he listed under the generic name Fulgora. It is clear that what Linnaeus had decided upon and what he attempted to do with the limited material available to him in 1764 and with the fuller material available in 1767, was to erect a genus to contain the species which in 1758 he had placed in the section "Noctilucae" (capite antice protracta in vesicam oblongam) of the genus Cicada. It was merely an accident that in 1764 he did not have before him all the species which he had originally included in the "Noctilucae", namely C. laternaria, C. candelaria, C. phosphorea, C. noctivida, and C. lucernaria, the only two then at his disposal being the first two.

The generic name Laternaria was published without a description, but two nominal species were included in it, of which the first is the type species by absolute tautonymy. This generic name accordingly satisfies the requirements of Article 25 and is an available name. The name Fulgora cannot therefore be interpreted as a nomen novum for an unavailable name. It must therefore be regarded as a substitute name for Laternaria, and, as it was published without a type designation, it may be argued that, by application of Rule (f) in Article 30, the genus Fulgora takes, as its type species, the type species of the genus which it replaces, namely Cicada laternaria Linnaeus, 1758.

If the foregoing contention is not upheld, it becomes necessary to examine the argument advanced by Kirkaldy in 1913 (Bull. Hawaii. Sug. Ass. (Ent. Ser.) 12:11) that Sulzer (1776) selected Fulgora europaea Linnaeus as the type species of the genus Fulgora by publishing an unambiguous figure of that species (pl. 9, fig. 5) with the following statement (: 85):—

Wir haben in unserer Tafel die Kegelstirn nicht gewählt, als wenn sie dem Leser den vollständigsten und richtigsten Begriff von diesem Geschlechte geben könnte, sondern weil sie noch wirgends abgebildet worden, und gleichwohl nicht nur eine Europäerin, sondern wol gar eine Schweizerin ist; wenn man aber beliebt Rösel's vorteftliche Abbildungen des grossen Laternträgers und des Kleinern, der sich in Kennzeichen Tab. X fig. 62a befindet, mit dieser Beschreibung zusammen zu halten, so wird man eine genugsame Kenntniss davon erlangen. Linne beschreibt 9 Arten.\*

It is considered that the foregoing action by Sulzer closely resembles the statement made by Lamarck in 1801 (Syst. Anim. sans Vertèbres) regarding the purpose of citing representative species for the genera which he was then discussing. Accordingly, under the precedent set by the rejection of Lamarck's action as constituting selections of type species by the ruling given by the International Commission on Zoological Nomenclature in their Opinion 79, Sulzer's action in the present case must be rejected as insufficient to constitute a type selection for the genus Fulgora, under Rule (g) in Article 30.

<sup>\*</sup> The following is a translation of the passage quoted from the Sulzer (1776):—
For our plate we have not selected the Cone-Face as giving the reader the most complete and most correct idea of this genus, but a species which, although nowhere hitherto figured, is not only a European, but even a Swiss insect; but, if the reader wishes to compare Rösel's striking illustration of the large Lanternbearer which appears on plate 10, fig. 62a with this description, he will gain an adequate idea therefrom. Linnaeus described nine species.

We have now to consider the action taken by Latreille in 1810 (Consid. gén. Crust. Arach. Ins.: 434), where he cited "Fulgora europaea Fab." as the type species of "Fulgore," which earlier (: 262) in the same work he had defined under both the French and Latin forms of this generic name ("Fulgore" and Fulgora). The species so cited by Latreille, by description, by bibliographic citation and by geographical distribution is unquestionably Fulgora europaea Linnaeus, 1767. Latreille's action in the Consid. gén. has been ruled by the International Commission on Zoological Nomenclature as constituting rigorous selections of type species for the genera there dealt with (Opinions 11 and 136) and accordingly his selection of Fulgora europaea Linnaeus as the type species of Fulgora Linnaeus must be accepted as complying with the Rules, if it is held that no type species had been designated or validly selected for that genus prior to Latreille's action in 1810.

It is urged however that, quite irrespective of the merits of the claims advanced on behalf of the foregoing authors to have designated or selected a type species for the genus Fulgora Linnaeus, there is strong historical reason for conserving this generic name for the species (Cicada laternaria Linnaeus) which Linnaeus considered to be luminous. By the use of such terms as laternaria (which he thought sufficiently striking to adopt from Merian), phosphorea and Fulgora, by the note which he inserted in the description regarding the alleged nocturnal luminosity of this species, and by the first place which he consistently gave to this species in all his writings on Homoptera, Linnaeus clearly revealed that his conception (1) of the Section "Noctilucae" of the genus Cicada, (2) of the genus Laternaria, and (3) of the genus Fulgora was based upon this insect and extended to other species, in so far as they possessed what he supposed to be the essential organ of luminosity, a cephalic process.

Action by the International Commission on Zoological Nomenclature desired: The International Commission on Zoological Nomenclature are asked, either, if they think it proper, to declare that Cicada laternaria Linnaeus, 1758, is the type species of the genus Fulgora Linnaeus, 1767, under Rule (f) in Article 30, or, if they do not consider this to be the case, to use their plenary powers to designate the foregoing species as the type species of this genus.

#### Case 2

Aim of present application: The aim of the present application is to secure the suppression, under the plenary powers of the generic name Laternaria Linnaeus, 1764, in favour of the name Fulgora Linnaeus, 1767.

Discussion of the case: With the exception of Kirkaldy and Haupt, who based their classification upon the belief that Fulgora europaea Linnaeus, 1767, was the type species of the genus Fulgora Linnaeus, 1767, students of Homoptera have universally employed the generic name Fulgora for 184 years as the generic name either of the Neotropical species Cicada laternaria Linnaeus, 1758, or of the Oriental species Cicada candelaria Linnaeus, 1758. Further, the generic name Fulgora formed the basis of the first group names to be adopted (namely Fulgorellae Latreille, 1807; Fulgoridae Leach, 1817; Fulgorina Burmeister, 1835; Fulgorelles, Fulgorites and Fulgoroids Spinola, 1839) and their later modifications.

Scrutiny of the type designations and type selections made for the genera Laternaria Linnaeus, 1764, and Fulgora Linnaeus, 1767, strongly suggests that these genera have the same species, Cicada laternaria Linnaeus, 1767, as their respective type species and almost the universal practice of students of this group has been to treat as the type species of Fulgora the above species which certainly is the type species of Laternaria.

It is considered that in this case the application of the Law of Priority. which was designed to stabilise nomenclature, would have the opposite effect, It would lead to the suppression, as a synonym, of one of the earliest and best known generic names in zoology (Fulgora Linnaeus, 1767) and with it the series of supergeneric terms founded upon it, and would leave in its stead a name (Laternaria Linnaeus, 1764) which only students of the Hemiptera are likely to recognise and which only two or three have used as the basis of the name for a supergeneric unit. The name Fulgora Linnaeus presents a clear case of a name which should be preserved for the sake of avoiding confusion.

Action by the International Commission on Zoological Nomenclature desired: The International Commission on Zoological Nomenclature are asked (1) to use their plenary powers (a) to suppress the generic name Laternaria Linnaeus, 1764, and (b) to validate the generic name Fulgora Linnaeus, 1767, and (2) to place the latter generic name (with Cicada laternaria Linnaeus, 1758, as type species) on the Official List of Generic Names in Zoology.

# REPORT ON THE PROPOSAL THAT THE GENERIC NAME "FULGORA" LINNAEUS, 1767 (CLASS INSECTA, ORDER HEMIPTERA) SHOULD BE VALIDATED UNDER THE PLENARY POWERS

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

#### (Commission's reference Z.N.(S.)162)

Mr. R. C. Fennah has asked the International Commission on Zoological Nomenclature to use its pleanary powers to validate the generic name Fulgora Linnaeus, 1767 (Class Insecta, Order Hemiptera) and thus to avoid the serious confusion which would be likely to arise if that name were to be discarded in favour of the virtually unknown name Laternaria Linnaeus, 1764. Mr. Fennah first wrote to the Commission on this subject in August 1944. After expressing the belief that, under the Règles, Fulgora Linnaeus, 1767, was an objective synonym of Laternaria Linnaeus, 1764, the two genera having the same species as their respective type species, Mr. Fennah then pointed out that the question at issue involved not only the status of the generic name Fulgora itself for within the previous 137 years a large number of terms had been applied to units of higher taxonomic rank based upon the word "Fulgora". In this connection he cited the terms: Fulgorellae, Fulgorida, Fulgorides,

Fulgorelles, Fulgorina, Fulgoriens, Fulgoritae, Fulgoridea and Fulgoridae. Mr. Fennah continued as follows: "In the interests of nomenclatorial stability I consider that the group names based on Fulgora Linnaeus should be preserved, on either or both of the following grounds: (1) The group name based on Fulgora has been universally employed for 137 years, and should be conserved on the basis of long usage: (2) The group name based on Fulgora is the oldest supergeneric name, based on a valid genus, and therefore should take priority over any other existing or potential supergeneric name." In the foregoing communication Mr. Fennah did not formulate concrete proposals for securing the object which he had in view, but not long afterwards, following upon a correspondence between Mr. Fennah, Dr. W. E. China (British Museum (Natural History)) (with whom Mr. Fennah had been in communication before he approached the Commission on this case) and myself, Mr. Fennah's present application was formally submitted to the Commission. The possible use of the plenary powers in the present case was advertised in the prescribed manner in December 1947. No objection of any kind was received in response to this advertisement.

2. The purpose of the present Report is to discuss two matters arising out of Mr. Fennah's application: first to examine in closer detail what is the position under the Règles, as regards the type species of the nominal genera Laternaria Linnaeus, 1758, and Fulgora Linnaeus, 1767; second, to elaborate to such extent as may be necessary, the recommendations submitted regarding the action required, if the Commission decides to approve the stabilisation of the generic name Fulgora in its accustomed sense, in order that action may comply with the decisions taken in Paris in 1948 by the Thirteenth International Congress of Zoology in regard to the manner in which cases of this kind should be dealt with.

## I. The type species of the nominal genera "Laternaria" Linnaeus, 1764, and "Fulgora" Linnaeus, 1767

3. The type species of the nominal genus Laternaria Linnaeus, 1764: This nominal genus, as originally established by Linnaeus contained two nominal species, namely: (1) Cicada phosphorea Linnaeus, 1758; (2) Cicada candelaria Linnaeus, 1758. The first of these nominal species is subjectively identified by specialists with the nominal species Cicada laternaria Linnaeus, 1758, and, on the basis of this subjective identification, the argument has been advanced that the latter species is automatically the type species of the nominal genus Laternaria Linnaeus, 1764, by absolute tautonymy under Ruly (d) of Article 30. This particular argument is fallacious, for it assumes that it is possible for the type species of a genus to be a nominal species not included in the genus concerned at the time when the generic name was first published. Fortunately, however, a closer inspection of the Museum Ludovicae Ulricae of Linnaeus shows that at the time when Linnaeus first published the generic name Laternaria, he included, in the synonymy of the first of the two nominal species which he then referred to that genus (Cicada phosphorea Linnaeus, 1758) the reference "Syst. Nat. 434 No. 1". This reference is to page 434 of the 10th edition of the Systema Naturae, where the species bearing the number "1" is Cicada laternaria Linnaeus, 1758.

- 4. Thus, the nominal species Cicada laternaria Linnaeus, 1758, was included by Linnaeus in the genus Laternaria Linnaeus, 1764, as a synonym of one of the nominal species then recognised by him as belonging to that genus. The point which has next to be considered is whether the inclusion in a specific synonymy of the name of a nominal species constitutes, for the purposes of Article 30, the citation of that nominal species as one of the species originally included in the genus concerned. If the answer to this question is in the affirmative, then in the present case the nominal species Cicada laternaria Linnaeus, 1758, is the type species of the genus Laternaria Linnaeus, 1764 by absolute tautonymy; if on the other hand, the answer to this question is in the negative, then the above nominal species is not one of the originally included species of the genus Laternaria, and, as the subjective identification of Laternaria phosphorea (Linnaeus) (=Cicada phosphorea Linnaeus, 1758) with Cicada laternaria Linnaeus, 1758, by later authors is irrelevant, when considering what is the type species of this genus, it would be necessary in that event to turn to the later literature to find out which of the two originally included species had first been selected as the type species of Laternaria by a subsequent author.
- 5. At the time when Mr. Fennah's application was submitted to the Commission there existed no authoritative ruling on the question discussed above; in consequence, it was not possible to ascertain, without special reference to the International Commission, whether or not Cicada laternaria Linnaeus, 1758, was the type species of the genus Laternaria Linnaeus, 1764. It was not until July 1948 that the question of principle involved was settled by the Thirteenth International Congress of Zoology, when it defined the species which, for the purposes of Article 30, were to be regarded as the nominal species originally included in any given nominal genus and which alone therefore were eligible to become the type species of that genus. On this question the Congress decided that words should be inserted in the Règles "to make it clear (a) that the nominal species to be regarded as having been included in a given nominal genus at the time when the name of that genus was first published are (i) the nominal species cited by the original author as valid taxonomic species belonging to that nominal genus and (ii) any nominal species cited on that occasion as synonyms of nominal species falling in (i) above, and that the foregoing nominal species are alone eligible for selection as the type species" (see 1950, Bull. zool. Nomencl. 4: 179-180).
- **6.** In the light of the foregoing decision by the Paris Congress, we see at once that *Cicada laternaria* Linnaeus, 1758, is to be regarded as one of the nominal species included in the genus *Laternaria* Linnaeus, 1764, at the time when that generic name was first published. Now that this proposition has been established, it follows automatically, under Rule (d) in Article 30, that *Cicada laternaria* Linnaeus, 1764, is the type species of the nominal genus *Laternaria* Linnaeus, 1764, by absolute tautonymy.
- 7. The type species of the nominal genus Fulgora Linnaeus, 1767: As pointed out by Mr. Fennah, Linnaeus in 1767 included in the new genus Fulgora (i) the two nominal species which, three years earlier he had placed in the then newly named genus Laternaria Linnaeus, 1764, and (ii) seven other nominal species not mentioned by Linnaeus at the time when he published the generic name Laternaria. From a practical point of view Linnaeus may certainly be

regarded as having substituted in 1767 the new generic name Fulgora for the generic name Laternaria which he had first published three years earlier (in 1764). Nor is the reason far to seek: throughout his writings Linnaeus invariably rejected a generic name that was tautonymous with the trivial name of one of the included species. This problem did not, from his point of view, arise in 1764, when he first published the generic name Laternaria, for on that occasion he applied the trivial name phosphorea Linnaeus, 1758 (originally published in the binominal combination (Cicada phosphorea) to the species to which in 1758 he had applied the trivial name laternaria Linnaeus, 1758 (in the binominal combination Cicada laternaria). In 1767, however, Linnaeus decided to discard the name phosphorea Linnaeus, 1758, as the trivial name of the species in question and to restore to it the trivial name laternaria Linnaeus, 1758. If Linnaeus had taken no other action in 1767, this species would then have had the tautonymous name Laternaria laternaria (Linnaeus, 1758). But this would have offended against Linnaeus' rule that tautonymy of this kind was to be barred and it can hardly be doubted that it was to get over this difficulty that he dropped the generic name Laternaria Linnaeus, 1764, and applied to the genus in question the new generic name Fulgora, the name of the species with which we are here concerned thus becoming Fulgora laternaria (Linnaeus, 1758).

8. While the above is, I am convinced, the correct explanation of the action taken by Linnaeus in this matter, we are concerned, from the point of view of nomenclature not with the reasons which prompted the action taken by Linnaeus but with the nomenclatorial consequences of that action, judged solely by the wording used in the Règles. Rule (f) in Article 30 contains a provision that Mr. Fennah has argued is, and which I myself formerly considered could be held to be, applicable to the present case. This Rule reads: "In case a generic name without originally designated type species is proposed as a substitute for another generic name, with or without type species, the type species of either, when established, becomes ipso facto the type species of the other." We are accordingly confronted here, with the need for an interpretation of Rule (f) in Article 30, for, in the absence of such an interpretation, it is impossible to make any progress with the consideration of the question of the type species of the genus Fulgora Linnaeus. The Thirteenth International Congress of Zoology at Paris in 1948 decided that, in future, general questions relating to the interpretation of the Règles are not to be dealt with by the Commission in Opinions relating to individual nomenclatorial problems but are to be considered separately, decisions reached on such matters being recorded in Declarations (see 1950, Bull. zool. Nomencl. 4: 136-137). In accordance with the procedure so prescribed, I have prepared a separate application (File ZN.(S.)539), in which I discuss what appear to me to be the relevant considerations in this matter and arrive at the conclusion, which I there submit for the favourable consideration of the International Commission, that, in order to be brought within the scope of Rule (f) of Article 30, a generic name must have been published with an express intimation that it was put forward as a substitute for some other name. It is necessary, for the purposes of the present application, to make some assumption as to the meaning to be attached

<sup>&</sup>lt;sup>2</sup> See pp. 45-48 below.

to the foregoing Rule, and I have therefore assumed that that Rule has the meaning which, for the reasons explained in application Z.N.(S.)539, I believe that it has and which I therefore recommend the Commission to endorse. Naturally, if the Commission were to take a different view, it would be necessary to re-examine the case of the name Fulgora Linnaeus in the light of the decision so taken. Meanwhile, the provisional adoption of the foregoing assumption renders it possible to make progress with the present case.

- **9.** The type species of the genus Fulgora Linnaeus was not designated or indicated under any of the Rules lettered (a) to (d) in Article 30; nor, on the assumption adopted in paragraph 8 above, was the type species of this genus determined under Rule (f) in Article 30, for, when Linnaeus published the generic name Fulgora in 1767, he said nothing to imply that it was a substitute for the earlier name Laternaria Linnaeus, 1764. Accordingly (subject to the reserve specified in the preceding paragraph) we reach the conclusion that the type species of the genus Fulgora Linnaeus, 1767, can only be determined under the one remaining Rule in Article 30, namely Rule (g) (type species by subsequent selection).
- 10. When in 1767 he established the nominal genus Fulgora, Linnaeus placed in it altogether nine nominal species, namely (1) the five nominal species which in 1758 he had described as belonging to the Section "Noctilucae" of the genus Cicada—of which three (phosphorea, laternaria (then treated as identical with phosphorea) and candelaria were in 1764 placed in the genus Laternaria—and (2) four nominal species then named for the first time (namely Fulgora diadema nov. sp.; Fulgora flammea nov. sp.; Fulgora truncata nov. sp.; Fulgora europaea nov. sp.). Any one of these nominal species is, therefore, eligible to be selected as the type species of the genus Fulgora Linnaeus by a later author, acting under Rule (g) in Article 30. It is necessary therefore to examine the literature, to determine which of these nine nominal species was first so selected.
- 11. The first author on whose behalf a claim has been advanced that he selected a type species for the genus Fulgora Linnaeus is Sulzer (1776). This claim, which was advanced first by Kirkaldy in 1913, is examined by Mr. Fennah in the application which he has submitted to the Commission, where the passage in Sulzer relied upon by Kirkaldy is quoted in full. Mr. Fennah concludes that Sulzer's action cannot possibly be regarded as constituting the selection of a type species for the genus Fulgora Linnaeus; I entirely share his view.
- 12. The next work which has to be considered is Latreille's Consid. gén. Crust. Arach. Ins. of 1810, the entries in which, as noted by Mr. Fennah, have been accepted by the International Commission as constituting selections of type species for the genera there enumerated in every case where one species only was spécified by Latreille (Opinion 136). On turning to this work, we find that Latreille cited one species only, "Fulgora europaea Fab." under the generic name "Fulgore" (French) and Fulgora (Latin). Fabricius himself never published the binominal combination Fulgora europaea as a new name and there is thus nomenclatorially no such name as Fulgora europaea. What Fabricius did do in 1775 (in the Systema Entomologiae: 674) was to cite a nominal

species under the binominal combination Fulgora europaea, which he correctly attributed to Linnaeus. The nominal species Fulgora europaea Linnaeus, 1767, is therefore the species which was selected by Latreille as the type species of Fulgora Linnaeus, 1767. As that species was (as we know) one of the species originally included by Linnaeus in the genus Fulgora and as no type species had been designated, indicated or selected for this genus prior to the action taken by Latreille in 1810, that author's selection of Fulgora europaea Linnaeus, 1767, is valid under the Règles and that species is the type species of the genus Fulgora Linnaeus, 1767.

**13.** It is important in this connection to note that the nominal species Fulgora europaea Linnaeus, 1767, is currently referred to the genus Dictyophara Germar, 1833 (Rev. Ent. 1(4):175), of which indeed it is the type species by subsequent selection by Desmarest (1845) (in d'Orbigny, Dict. univ. Hist. nat (nouv. ed.) 5:121).

Further, as Mr. Fennah has pointed out (in litt., 1945), the above genus is the type genus of a currently recognised family, the DICTYOPHARIDAE. It follows from what has been said in paragraph 12 above that the generic name Dictyophara German, 1833, is under the Règles an objective synonym of the generic name Fulgora Linnaeus, 1767, each of these nominal genera having the same species as its type species. The confusion likely to follow the loss by the species concerned of so well known a generic name as that of Fulgora would naturally be very greatly aggravated if in addition that name remained a valid name but had to be applied to some entirely different genus (in this case, the genus Dictyophara Germar). Serious as in any circumstances such consequences would be, they would be very seriously intensified in the present case through the necessity of using the family name fulgoridate for the family at present known as the DICTYOPHARIDAE. In this connection, it will be recalled that at the time when the International Congress of Zoology first granted plenary powers to the International Commission on Zoological Nomenclature to suspend the operation of the Règles, the avoidance of transfers of generic names from one genus to another (as the application of the Règles in the present case would require) was specifically prescribed as one of the purposes for which the plenary powers were granted to the Commission.

## II. The reputed generic name "Noctiluca" Houttuyn, 1766 in relation to the generic name "Fulgora" Linnaeus, 1767

14. In the year 1947 attention was drawn in connection with the present case to a reputed generic name Noctiluca Houttuyn, 1766, stated to have been published in 1766 in that author's Naturlyke Historie; this name, it was claimed, had priority over, and should therefore under the Règles replace, the generic name Fulgora Linnaeus, 1767. In these circumstances it was obvious that this was a matter which must at once be investigated, for it would clearly be pointless to ask the Commission to validate the name Fulgora Linnaeus, 1767, as against the name Laternaria Linnaeus, 1764, while still leaving Fulgora Linnaeus liable to be replaced by the earlier name Noctiluca Houttuyn.

15. At Mr. Fennah's request this matter was therefore at once investigated by Dr. W. E. China (British Museum (Natural History)), who, on consulting

Houttuyn's Natuurlyke Historie, found that author had not employed the term Noctiluca as a generic name and had not used it in the nominative singular. What he did was to employ this word in the nominative plural, i.e. as "Noctilucae," "in exactly the same sense as did Linnaeus in the Syst. Nat. of 1758, that is, as a subdivision of Cicada." This discovery put an end to all threat to Fulgora from this quarter, for already in 1944 the Commission had rendered an Opinion (Opinion 183) in which they had ruled that, in order to acquire availability as a generic name, a word must not only be a noun substantive, but must also have been published in the nominative singular. This ruling was in 1948 incorporated into the Règles by a decision taken by the Thirteenth International Congress of Zoology (see 1950, Bull. zool. Nomencl. 4: 139-140). It will be seen therefore that the alleged generic name Noctiluca Houttuyn. 1766, possesses no existence under the Règles, being a mere cheironym. As such, it should, like other cheironyms which have given trouble in the past, be put finally to rest by being registered in the Official Index of Rejected and Invalid Generic Names in Zoology.

#### Summary of Conclusions reached on the data available

**16.** We may now summarise as follows the conclusions which may be drawn from the data available in regard to the present case:—

(1) The generic name *Laternaria* Linnaeus, 1764, is an available name and the nominal genus in question has *Cicada laternaria* Linnaeus, 1758, as its type species by absolute tautonymy (paragraph 6).

(2) There is no such generic name as the alleged generic name *Noctiluca* Houttuyn, 1766, which is a mere cheironym (paragraph 15).

(3) The generic name Fulgora Linnaeus, 1767, is an available name and the nominal genus in question has, as its type species, Fulgora europaea Linnaeus, 1767, by subsequent selection by Latreille in 1810 (paragraph 12).

(4) The nominal species Cicada laternaria Linnaeus, 1767, is currently referred to the genus Fulgora Linnaeus, 1767, the older generic name Laternaria Linnaeus, 1764, not being in use. As used in this sense, the generic name Fulgora Linnaeus has formed the basis of the family name Fulgoridae, which is in universal use (paragraph 1).

(5) The nominal species Cicada europaea Linnaeus, 1767 (the type species, under the Règles, of the genus Fulgora Linnaeus, 1767) is currently placed in the genus Dictyophara Germar, 1833, of which it is the type species. As used in this sense, the generic name Dictyophara Germar has formed the basis of the family name DICTYOPHARIDAE, which, like the family name FULGORIDAE, is now in general use (paragraph 13).

(6) The strict application of the *Règles* in the present case would thus (a) deprive the species universally known as *Fulgora* of the generic name which has been for so long applied to them, and (b) involve the confusing transfer of that generic name to the genus now known by the name *Dictyophara* Germar. A further result of the strict application of the *Règles* would be that the family now known by the name fulgoridae would need to be known by the name laternaridae. while the family name fulgoridae would need to be transferred to the family now known by the name dictyopharidae.

- 17. The question which it will, therefore, be necessary for the International Commission on Zoological Nomenclature to consider is whether the undoubted prima facie case advanced by Mr. Fennah, with the support of Dr. China, is such that the use of the plenary powers would be justified in order to preserve the accustomed use of the generic name Fulgora Linnaeus and of the family name fulgoridae and to prevent those names from being transferred respectively to the genus now known by the name Dictyophara Germar and the family now known as dictyopharidae.
- **18.** In the event of the Commission deciding that this is certainly a case where the strict application of the *Règles* would give rise to quite unjustified confusion and therefore that the plenary powers should be used in the interests of nomenclatorial stability, the detailed action which the Commission would need to take would be the following:—

(1) use the plenary powers:—

- (a) to suppress the generic name *Laternaria* Linnaeus, 1764, for the purposes of the Law of Priority but not for those of the Law of Homonymy;
- (b) to set aside all selections of type species for the nominal genus Fulgora Linnaeus, 1767, made prior to the proposed decision;
- (c) to designate the nominal species Cicada laternaria Linnaeus, 1758, to be the type species of the nominal genus Fulgora Linnaeus, 1767;
- (2) declare the alleged generic name *Noctiluca* Houttuyn, 1766, to be a cheironym;
- (3) place the following generic names on the Official List of Generic Names in Zoology, with the type species severally specified below:—
  - (a) Fulgora Linnaeus, 1767 (gender of generic name: feminine) (type species, as designated under the plenary powers under (1)(c) above: Cicada laternaria Linnaeus, 1758);
  - (b) Dictyophara Germar, 1833 (gender of generic name: feminine) (type species, by selection by Desmarest (1845): Fulgora europaea Linnaeus, 1767);
- (4) place the under-mentioned generic names and alleged generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) the generic name *Laternaria* Linnaeus, 1764, as suppressed under (1)(a) above);
  - (b) the alleged generic name *Noctiluca* Houttuyn, 1766, declared to be a cheironym under (2) above;
- (5) place the under-mentioned specific trivial names on the Official List of Specific Trivial Names in Zoology:—
  - (a) laternaria Linnaeus, 1758 (as published in the binominal combination Cicada laternaria);
  - (b) europaea Linnaeus, 1767 (as published in the binominal combination Fulgora europaea).

#### SUGGESTED ADOPTION OF A "DECLARATION" CLARI-FYING THE MEANING OF RULE (f) IN ARTICLE 30 (RULE RELATING TO THE TYPE SPECIES OF A NOMINAL GENUS ESTABLISHED TO REPLACE AN EARLIER NOMINAL GENUS)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

#### (Commission's reference Z.N.(S.)539)

The application relating to the type species of the genus Fulgora Linnaeus, 1767 (Class Insecta, Order Hemiptera) submitted to the International Commission on Zoological Nomenclature by Mr. R. G. Fennah (Imperial College of Tropical Agriculture, Trinidad) raises in a direct manner a question relating to the interpretation of Rule (f) in Article 30 of the  $R\grave{e}gles$ . Any answer to the question submitted necessarily implies the giving of a ruling by the Commission on the interpretation of the foregoing Rule. Under the decisions on procedure taken by the Thirteenth International Congress of Zoology at its meeting held in Paris in 1948, interpretative decisions of this kind are in future to be recorded by the Commission in the series "Declarations," the series "Opinions" being reserved for decisions in regard to individual nomenclatorial problems not involving any new interpretation of the  $R\grave{e}gles$  (see, 1950, Bull. zool. Nomencl. 4: 132-137).

- 2. Under the procedural decision referred to above, it will therefore be necessary in future for the International Commission, when considering an application which is concerned primarily with obtaining a ruling in regard to some particular name, but which requires an interpretative decision on some aspect of the *Règles* as a condition precedent to the giving of a ruling on the individual case submitted, to deal first with the general question of principle involved, and, having done so, to deal with the individual problem of nomenclature submitted. In the present case, therefore, a "Declaration" will be needed on the interpretation of Rule (f) in Article 30, and also an "Opinion" on the type species of the genus *Fulgora* Linnaeus, that *Opinion* being based, so far as concerns the meaning to be attached to Rule (f), on the *Declaration* to be decided upon immediately previously.
- **3.** Rule (f) in Article 30: Rule (f) in Article 30 contains the following provision for determining (where applicable) the type species of a nominal genus, for which no such species was designated (Rule (a)) or indicated (Rules (b), (c), or (d)) by the author by whom the generic name in question was first published:—
  - (f) In case a generic name without originally designated type species is proposed as a substitute for another generic name, with or without type species, the type species of either, when established, becomes ipso facto type species of the other.
- **4.** The twofold issue involved: In this, as in similar cases, a twofold issue is involved: First, what is the meaning of the provision, as it actually stands in the Règles? Second, is that meaning the one which it is desirable that the

provision should have? Further, it is possible that, whatever answer is given to these questions, it may be considered desirable to amend or clarify the wording of the existing provision in the Règles; an amendment of the wording would certainly be necessary if it were to be considered desirable to alter the meaning of the existing provision; a verbal change might be considered necessary, if it were to be considered that the meaning of the existing provision was the desirable meaning but that it was not expressed in an absolutely unambiguous manner. In the following paragraphs the main issues involved are considered in turn. Finally, consideration is given to the question whether any, and, if so, what changes in wording are required in the existing provision.

5. The meaning of Rule (f) in Article 30, in its present form: The key word in Rule (f) in Article 30, as it exists at present, is the word "proposed", for the whole Rule is concerned to define the situation which arises when a new generic name "is proposed" as a substitute for another generic name. It is necessary therefore carefully to consider the meaning which properly attaches to the word "proposed", as used in this Rule. When an author publishes a new generic name, he may adopt either of two courses: (1) he may state why he considers the new name to be necessary (e.g. because a name is needed for a previously unrecognised genus or for a genus, which, although already recognised, does not possess a nomenclatorially available name), or (2) the author concerned may simply publish the new generic name without any explanation as to why he does so or even without any indication that the name is a new name. Only in the case of names falling in the first of these classes is there any evidence as to the reason which led the author concerned to "propose" (i.e. to publish) the new generic name: where the author either (a) adopts a formula, or (b) uses words, which either clearly state or definitely imply that the new name so published is intended to be a substitute for some previously published name, then and then only can it be stated as an ascertained fact that new name was in fact "proposed" as a substitute for some other name. In the absence of such a formula or such words, it must always be a matter of subjective personal opinion whether or not the later name was intended by its author to be a substitute name or whether it was published inadvertently or through ignorance of the existence of the earlier name in question. Such a name may in particular cases, have been intended to be a substitute name and it is possible sometimes to guess why it was that the author concerned published it in preference to using the older name already available (e.g. in the case of xvIIIth century zoologists, from aversion from absolute tautonomy between generic names and specific trivial names), but even in such a case the lack of direct evidence as to the reasons which prompted the author concerned to publish the new generic name makes it impossible to establish as a fact why it was the the author concerned "proposed," that name. Accordingly, on any strict interpretation of the words used in Rule (f)in Article 30, it must be concluded that that Rule applies only to those cases, where an author, when publishing a new generic name, refers also to a previously published generic name and, either by the use of some formula or through explanatory words, indicates that the new name is a substitute (for whatever reason) for the older name in question.

- 6. The bearing of Opinion 10 on the meaning of Rule (f) in Article 30: While for the reasons given in the preceding paragraph, it is clear that the wording employed in Rule (f) in Article 30 is such as to bring within the scope of that Rule only generic names which, when first published, were accompanied by an express indication that they were substitutes for previously published generic names, there is fortunately direct evidence provided by the Commission itself very shortly after the enactment of Article 30 in its present form that the foregoing is not only the meaning which inevitably attaches to the words used in Rule (f) but is also the meaning which the Commission, as the body by which that Rule had been drafted and recommended to the Congress, intended that Rule to convey. This evidence is provided by the Commission's Opinion 10. The date on which this Opinion was adopted is not known but it was first published in July 1910 (Smithson. Publ. 1938: 15-16), together not only with the nine preceding Opinions (of which Opinions 6-9 were then published for the first time) but also with the next fifteen following Opinions (Opinions 11-25): it is likely therefore that Opinion 10 was adopted not later than sometime in 1909 and possibly earlier, in any case within two years of the adoption of the present Article 30 by the Boston Congress in 1907. Opinion 10 is concerned to make clear what is (or may be) the type species of a genus established with limits identical with those of a previously established genus, if Rule (f) in Article 30 did not require that, in order to come within its scope, a generic name must be published with an express indication that it was intended to be a substitute for some previously published name, a name published for a genus with limits identical with those of a genus having previously published name would fall within the scope of Rule (f) and in consequence the selection of a type species for either of the nominal genera concerned would (under that Rule) automatically constitute also the selection of the same species to be the type species of the other genus. We see however from Opinion 10 that, where two nominal genera are established with identical limits, the type species of one is not automatically the type species of the other; on the contrary, any author is free to select any of the originally included species to be the type species of either. Here therefore we have implicit evidence from the Commission itself to show that an express indication that a name is published as a substitute for another name is necessary, in order to bring the later published of the two names within the scope of Rule (f) in Article 30.
- **7.** Question whether the present meaning of Rule (f) in Article 30 is the desirable meaning: Having now established, both by the normal method of interpretation and by reference to a governing decision already given by the Commission itself, what is the meaning properly attaching to Rule (f) in Article 30, as it at present stands, we may turn to consider whether that is the meaning which it is desirable that that Rule should bear. The choice is a simple one: Is it desirable (1) that (as at present) an author publishing a new generic name must expressly indicate (in some clear manner) that that name is a substitute for some specified earlier name, in order to bring the new name within the scope of Rule (f), or (2) that the wording of that Rule should be relaxed in such a way as to bring within the scope of that Rule not only any name expressly published as a substitute name, but also any name which, though not published

with any such express indication, has the appearance of being intended to be a substitute name. It is only necessary to pose the question in order also to provide the answer. For a modification of Rule (f) in the sense indicated above would be to import into that Rule precisely that defect which it is the aim of draftsmen to avoid and which the Thirteenth International Congress at Paris in 1948 was at pains, as far as possible, to eradicate from the  $R\`egles$ , namely a provision which depends not upon some objective external fact, but on a subjective idea (in this case, an idea as to the intentions of a given author, when publishing a new name) to be formed by a person seeking to apply the provision in question. It is perfectly obvious that no provision that depends on a subjective criterion can ever lead to stability, for it is inevitable that some will apply that criterion in one way and others in the opposite way. It would therefore be a most retrograde step to substitute a subjective, for the present objective, basis for Rule (f) in Article 30.

- **8.** Question whether any verbal amendment of Rule (f) in Article 30 is desirable for the purpose of eliminating possible misunderstandings as to the meaning of that Rule: Having now examined the question of the meaning properly applicable to Rule (f) in Article 30 and having concluded also that that meaning is greatly to be preferred to the only meaning that could be substituted for it, we must pause to consider whether any, and, if so, what verbal amendment of Rule (f) is desirable for the purpose of eliminating possible misunderstandings in the future as to the meaning of this Rule. On this question, there will, I think, be general agreement as to the need for a drafting amendment designed to clarify the meaning of this Rule, in order to save zoologists in future from becoming involved in discussions such as those which have occurred in the past on the question whether the name Fulgora Linnaeus, 1767, should be regarded as the name of a genus then independently established by Linnaeus or whether it should be regarded as no more than a substitute name for the earlier name Laternaria Linnaeus, 1764, a question which plays an essential part in the application in regard to those names now submitted to the Commission by Mr. R. G. Fennah.
- **9.** Recommendation submitted: For the reasons set forth in the present note, I recommend that the International Commission on Zoological Nomenclature should render a Declaration (1) ruling that Rule (f) in Article 30 is to be interpreted (a) as though the words "expressly published" were inserted after the word "is" in place of the word "proposed," and (b) as though the words "some specified generic name of older date" were substituted for the words "another generic name," and (2) recommending that the foregoing changes be made in Rule (f) in Article 30 by the next International Congress of Zoology.

# PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A TYPE SPECIES FOR THE GENUS "GEOTRUPES" LATREILLE, 1796 (CLASS INSECTA, ORDER COLEOPTERA) IN HARMONY WITH CURRENT NOMENCLATORIAL USAGE

#### By ROBERT W. L. POTTS

(California State Department of Agriculture, San Francisco, California, U.S.A.)

#### (Commission's reference Z.N.(S.)338)

In checking early references to the generic name Geotrupes Latreille, 1796 (Préc. Caract. gen. Ins.: 6) (Class Insecta, Order Coleoptera) for a proposed general paper on the genus, it became apparent that the current use of this name is not in accordance with the Rules and that the strict application of those Rules would do serious violence to our current concept of this genus. It is to avoid the confusion which would so result that the International Commission on Zoological Nomenclature is now asked to use its plenary powers to designate, as the type species of this important genus, a species in harmony with current nomenclatorial practice.

The early history of the generic name Geotrupes may be summarised as follows:—

- (1) The generic name *Geotrupes* was first published in 1796 by Latreille. He gave a short generic diagnosis, but cited no nominal species as belonging to this genus, for which he designated no type species.
- (2) The next author to use the generic name Geotrupes was Fabricius, who in 1798 (Suppl. Ent. syst.: [1], 7-22) gave a description for the genus so named not at all parallel to that previously given by Latreille. Fabricius placed in this genus sixty-three species, most of which are now placed in the subfamily DYNASTINAE; only five of the species included by Fabricius in this genus belong to the present subfamily Geotrupinae, one of these being Scarabaeus dispar Fabricius, 1781 (Spec. Ins. 1:5). Elsewhere in the Suppl. Ent. syst. (: 2, 23-24) Fabricius listed under the generic name Scarabaeus species which are now treated as belonging to the genus Geotrupes.
- (3) In 1801 (Syst. Eleuth.: 2-26) Fabricius added further species both to Geotrupes and Scarabaeus, still preserving his concept of the two genera.
- (4) In 1802 (Hist. nat. gén. partic. Crust. Ins.) Latreille listed two species under the generic name Geotrupes, the first of these being Scarabaeus stercorarius Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:349).
- (5) In 1804 Latreille (*ibid.* **10**: 142-147) listed seven species in the genus *Geotrupes*; of these the first was *dispar* Fabricius and the fourth *stercorarius* Linnaeus. In his introduction to the genus Latreille complained at the way in which Fabricius had transposed the use

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of the names Geotrupes and Scarabaeus as used in the Précis des Caractères of 1796, saying: "J'avois posé les bases de ce genre Geotrupes dans mon ouvrage intitulé 'Précis des Caractères génériques des Insectes,' ou, pour parler plus vrais, je n'avois fait que donner un denomination à la seconde coup des scarabées d'Olivier, car ce naturaliste avait exposé tous les caractères de ce genre avant moi. Fabricius, en adoptant ce travail, a fait malheuresement une transposition de noms; mes scarabées sont devenus des geotrupes, et mes geotrupes des scarabées. Ce changement n'étant pas fondé, on me permettre de n'y avoir pas égard."

The position is therefore that the name Geotrupes was published in 1796 for a genus for which a diagnosis was given, but for which no nominal species were cited. Accordingly, the type species of Geotrupes would until 1948, have had to be determined under the provisions of the Commission's Opinion 46, but now has to be determined under the amended and clarified provisions adopted by the International Congress of Zoology in Paris in 1948 (see 1950, Bull. zool. Nomencl. 4: 159-160, 346). Under those provisions the only species which are eligible for selection as the type species of a genus established without any nominal species referred thereto are those species cited by name as belonging to the genus in question on the first occasion on which any species are so cited.

In the present case therefore the only species eligible for selection as the type species of Geotrupes Latreille, 1796, are those cited by Fabricius in 1798, unless it could be shown that Fabricius published the name Geotrupes in 1798 in ignorance of the fact that the same name had been published two years earlier by Latreille for what (at that time) was regarded a closely allied group of species. If it could be established this is what happened—and a ruling from the Commission would be needed to set this question at rest the name Geotrupes Fabricius, 1798, would be a new name, quite independent of (though a junior homonym of) Geotrupes Latreille and the species cited by Fabricius for that genus would have no bearing on the question of the species which are to be regarded as the sole originally included species of Geotrupes Latreille. There is however no evidence which would support such a hypothesis and it must therefore be dismissed. Another possibility that has been considered is that it really was by accident and not by intention that Fabricius used the names Geotrupes and Scarabaeus in the opposite sense to that in which those names had been used by Latreille; here again there is no evidence to support such a contention. Moreover, if such evidence had been available, it would have been necessary for the Commission to use its plenary powers to secure the necessary correction, for such an error, if it had been committed could not have been corrected automatically under Article 19, which is concerned only with the correction of the spelling of names.

Thus, under the Rules the only species eligible for selection as the type species of *Geotrupes* Latreille are those cited by Fabricius as belonging to that genus. As already explained *Scarabaeus dispar* Fabricius, 1781, is the only one of the species cited by Fabricius in 1798 which was also cited by Latreille in 1804. The selection of that species, as the type species, would alone secure that the genus *Geotrupes* remained in the subfamily GEOTRUPINAE as at present understood. The selection of that species would however be

open to strong objection: First, it would involve the transfer of the name Geotrupes to the genus now known as Ceratophyus Fischer de Waldheim, 1824 (Entomogr. Imp. russ. 2:143), of which Scarabaeus dispar Fabricius is also the type species (by selection by Jekel (1866, Ann. Soc. ent. France (4) 5:522, 535)). Second, such a transfer would do violence to the concept of the genus Geotrupes Latreille, which for nearly one hundred and fifty years has been based upon the belief that, under the selection made by Latreille in 1810 (Consid. gén. Crust. Arach. Ins.: 428), the type species of this genus was Scarabaeus stercorarius Linnaeus, 1758.

In these circumstances I ask the International Commission on Zoological Nomenclature to use its plenary powers to prevent the confusion which would certainly arise if it were no longer possible to accept *Scarabaeus stercorarius* Linnaeus as the type species of *Geotrupes* Latreille. The specific request which I put forward is that the Commission should:—

- (1) use its plenary powers to set aside all type selections for the genus *Geotrupes* Latreille, 1796, made prior to the decision now proposed to be taken, and to designate *Scarabaeus stercorarius* Linnaeus, 1758, to be the type species of the foregoing genus;
- (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
  - (a) Geotrupes Latreille, 1796 (gender of generic name: feminine) (type species, by designation, as proposed in (1) above, under the plenary powers: Scarabaeus stercorarius Linnaeus, 1758);
  - (b) Ceratophyus Fischer de Waldheim, 1824 (gender of generic name: masculine) (type species, by selection by Jekel (1866): Scarabaeus dispar Fabricius, 1781);
- (3) to place the under-mentioned trivial names on the Official List of Specific Trivial Names in Zoology:—
  - (a) stercorarius Linnaeus, 1758 (as published in the binominal combination Scarabaeus dispar) (trivial name of type species of Geotrupes Latreille, 1796);
  - (b) dispar Fabricius, 1781 (as published in the binominal combination Scarabaeus dispar) (trivial name of type species of Ceratophyus Fischer de Waldheim, 1824).

PROPOSED AMENDMENT OF THE "REGLES" TO PROVIDE THAT SPELLED-OUT LETTERS OR NUMERALS ARE NOT TO BE ACCEPTED AS AVAILABLE TRIVIAL NAMES, WHEN THOSE LETTERS OR NUMERALS WERE ORIGINALLY EMPLOYED AS ORDINALS FOR THE ENUMERATION OF THE SPECIES, SUBSPECIES OR INFRA-SUBSPECIFIC FORMS CONCERNED

By G. H. E. HOPKINS, O.B.E., M.A. (British Museum (Natural History), Zoological Museum, Tring, Herts)

#### (Commission's reference Z.N.(S.) 371)

The International Commission on Zoological Nomenclature has already decided in 1914 that Serial Letters, such as a, b, c, etc., are not acceptable as specific names. (Summary to Opinion 64, Smithson. miscell. Publ. 2256: 151.) It was decided at the recent Paris Congress that a provision to this effect should be incorporated in the Rules of Zoological Nomenclature (1950, Bull. zool. Nomencl. 4:140) and should be extended to cover the case of a serial letter used in conjunction with a trivial name like "var. g. bruhni" (1950, ibid. 4:348). It is clearly logical to consider that the decision of the Commission also covers the case of serial numerals used in the same way, but this is not actually stated and this ought to be done.

The case raised below is more difficult, since it is not clear whether or not the decision of the Congress covers it; it is the case where an author applies serial letters to a number of organisms and a subsequent writer spells them out. There is an excellent example in the Mallophaga, where Piaget 1880 (Pédiculines: 21, 366; 1885, Pédiculines Supplement: 75) described a number of forms as (:21) Docophorus pachypus var a cornuta, var. angulata, var. γ rotundata, and (1880: 366; 1885:75) as Lipeurus variabilis vars. a, β γ, δ, ε and η. Kellogg (1908, in Wytsman's Gen. Ins., 66, Mallophaga) correctly ignored (: 14) the Greek letters preceding the names given by Piaget to the forms he described as varieties of D. pachypus, but (: 45) spelled out those attached to Piaget's varieties of L. variabilis, so that in Kellogg's work these appear as L. variabilis, vars. alpha, beta, gamma, delta, epsilon and eta, all attributed to Piaget and with valid "indications" in the form of references to the page of Piaget's work on which they were described. It seems to me to be clear that Kellogg did not intend to convert Piaget's Greek letters into names and that it is in accordance with the spirit of Opinion 64 that they should not be so regarded, but the Rules inevitably pay little heed to what an author intended to do but only to what he did. I think it almost equally clear that (as the Rules stand) Kellogg did give names to the forms that Piaget had carefully left nameless, though of course Kellogg himself, and not Piaget, is the author of them. Nearly all authors have disregarded vars. alpha Kellogg. beta Kellogg, and the rest, or have applied to them Piaget's Greek letters, but very recently at least one author has used "var. delta Piaget" as a name and has thus brought the matter to a head. A decision must now be reached,

and at the same time a decision ought to be made on the question of numerals—if alpha, beta, gamma and delta used as a series are to be valid trivial names, then there is no logical reason why the same should not apply to one, two, three and four or to less well-known numerals such as tasi, lua, tolu and fa. If the decision is adverse to these spelled-out numerals and letters, it will have to be made clear that it does not affect the position of similar words when not used as part of a series, as in the case of so many species of Lepidoptera that have names such as delta, ypsilon, c-album or comma, which are not serial but refer to some characteristic of the insect.

I therefore suggest that the Commission should consider recommending the insertion into the Rules of a provision on the following lines: "Serial letters, such as a, b, c, etc., and serial numbers, such as 1, 2, 3, etc., whether used alone or in conjunction with a trivial name (e.g., var. g., bruhni) are not to be available as trivial names. And in instances in which serial letters of numerals were originally used merely as ordinals for the enumeration of species, varieties, etc., the fact that they may have been spelled out or transliterated by some later author does not confer on them any status of availability."

**POWERS** USE OF THE PLENARY PROPOSED FOR THE **TYPE SPECIES** DESIGNATE "LIPEURUS" NITZSCH. 1818. "COLPOCEPHALUM" NITZSCH 1818, AND "GYROPUS" NITZSCH, 1818 (CLASS INSECTA, ORDER MALLOPHAGA) IN HARMONY WITH THE GENERALLY ACCEPTED USE OF THOSE NAMES

By G. H. E. HOPKINS, O.B.E., M.A.

(British Museum (Natural History), Zoological Museum, Tring, Herts)

#### (Commission's reference Z.N.(S.)343)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers to designate as the type species of the genera *Lipeurus* Nitzsch, 1818, *Colpocephalum* Nitzsch, 1818, and *Gyropus* Nitzsch, 1818 (Class Insecta, Order Mallophaga) the species universally accepted as such, thereby avoiding the very serious confusion which would inevitably result from the strict application of the *Règles* in these cases. The foregoing names were published in a paper entitled "Die Familien und Gattungen der Thierinsekten . . . als ein Prodromus der Naturgeschichte derselben" which appeared in 1818 in volume 3 of Germar's *Mag. Ent.* for that year (*Lipeurus* on page 291; *Colpocephalum* on page 298; *Gyropus* on page 304).

Nitzsch (1818) published the descriptions of a number of genera and subgenera (the latter now all promoted to generic rank) of the Order Mallophaga (Class Insecta). In each instance he listed a number of names of included species, none of which was accompanied by descriptions though some of them had references to earlier descriptions under different names; he did not designate a type species in any instance. Many of the species listed by Nitzsch were described by Burmeister (1838, *Handb. Ent.* 2), using Nitzsch's material but apparently writing independent descriptions; the rest were described by Giebel in a series of works between 1861 and 1874; Giebel attributed the names to Nitzsch and apparently borrowed the descriptions from the latter's manuscript.

Subsequent authors, with the sole exception of Hopkins (1947, Entomologist 80: 14-19) have either accepted all the trivial names published by Nitzsch in 1818 as being available from that date or have regarded all of them as nomina nuda, so far as the 1818 work is concerned. Actually, most of the names are nomina nuda, but those with references to previous descriptions are accompanied by an "indication" within the meaning of Article 25 of the Règles, though most of them were entirely unnecessary and have since been relegated to synonymy. Failure to differentiate between these two classes of trivial names in Nitzsch's 1818 work has led to invalid selections of type species for the three genera dealt with in the present application. In the remaining instances valid selections of type species either have been made or can still be made without any action on the part of the International Commission. In the case, however, of the names Lipeurus, Colpocephalum and Gyropus the subsequent selections of type species for these genera, though today universally accepted,

are invalid under the *Règles*, and their rejection would inevitably involve serious changes in the nomenclature of the group, unless the International Commission sees fit to take action to avoid this.

#### (a) The type species of "Lipeurus" Nitzsch, 1818

Johnston and Harrison (1911, Proc. linn. Soc. N.S.W. 36: 326) purported to select "L. caponis Linn. (syn. L. variabilis N.)" as the type species of Lipeurus Nitzsch, 1818. Their action has been accepted by all subsequent authors, notably by Harrison (1916, Parasitology 9: 22) and by Clay (1938: 110) in her monograph of *Lipeurus* and related genera. Harrison's work of 1916 is the standard list of the Mallophaga and for all practical purposes the only one, since it is the most recent and also the only one in which any attempt is made to apply the principle of priority to the names. The selection made by Johnston and Harrison is invalid because Nitzsch (1818) did not mention caponis at all and mentioned variabilis (: 293) only as a nomen nudum, whereas other names listed by him in *Lipeurus* were accompanied by references to prior descriptions and are therefore available names. It is, of course, only from these available names that a type species for the genus can be selected without the use by the International Commission of its plenary powers. No valid type selection has as yet been made for this genus, but any such selection would inevitably result in the transfer of the name *Lipeurus* from the group that has always borne it since the original genus was divided by Harrison (1916: 26) to a group that has never borne it since the same date, for none of the species with technically available names that were cited by Nitzsch in 1818, is congeneric with *Pediculus* caponis Linnaeus, 1758 (Sust. Nat. (ed. 10) 1:614). Moreover, none of these species belongs to a group that is without a valid generic name. The change would be particularly unfortunate because *Lipeurus caponis* (Linnaeus) is a parasite of the domestic fowl and therefore is the subject, under that name, of a very extensive mass of economic literature.

The only means by which far-reaching confusion can be avoided is by the use by the International Commission of its plenary powers to give valid force to the (at present) invalid action by Johnston and Harrison in 1911. What is required, therefore, is that the International Commission should use its plenary powers to designate Pediculus caponis Linnaeus, 1758, to be the type species of the genus Lipeurus Nitzsch, 1818. It would be well also if the International Commission, when taking this action, were expressly to define the species to which this name is applicable. There is no doubt as to the species to which Linnaeus applied the name Pediculus caponis, but some of the bibliographical references that he cited refer to other species. Schrank in 1803 (Fauna boic.: 193) was the first author to draw attention to these erroneous references. The best and most recent definition of Pediculus caponis is that published by Miss Theresa Clay in 1938 (Proc. zool. Soc. Lond. (B) 108: 111-113, figs. 1, 2a, 2b, 3a). It is accordingly recommended that when this species is designated as the type species of Lipeurus Nitzsch, it should be defined by reference to Miss Clay's paper, that the generic name Lipeurus Nitzsch should then be placed on the Official List of Generic Names in Zoology, with the above species, defined as suggested, as its type species; and that the trivial name caponis Linnaeus, 1758 (as published in the binominal combination Pediculus caponis), defined as suggested, should be placed on the Official List of Specific Trivial Names in

Zoology. In order to avoid the risk of subsequent misunderstanding, it would be helpful if at the same time the International Commission were to place the invalid emendation *Liperus* Kellogg, 1902 (J. N. Y. ent. Soc. 10: 22) on the Official Index of Rejected and Invalid Generic Names in Zoology.

#### (b) The type species of "Colpocephalum" Nitzsch, 1818

Neumann (1906:58) selected Colpocephalum zebra Nitzsch, 1818, as the type species of the genus Colpocephalum Nitzsch, 1818. This selection has been followed by all subsequent writers, including Harrison in his list of the Mallophaga, to which reference has already been made (1916:21) and Ferris (1924 Parasitology 16: 59, fig. 2) in one of a series of papers in which he redistributed and figured the type species of some genera of the MENOPONIDAE. But Neumann's type selection for this genus is invalid, for Nitzsch cited Colpocephalum zebra (1818: 298) only as a nomen nudum; it was not until 1838 that this specific name was published with a description by Burmeister (Handb. Ent. 2 (2); 438). On the other hand, Nitzsch (1818: 299) did cite under the genus Colpocephalum one nominal species, Colpocephalum ochraceum Nitzsch, for which he provided an "indication" for the purposes of Article 25 of the Règles, by giving a reference to a previously published drawing. This species was the only one so cited by Nitzsch and is therefore the type species of Colpocephalum Nitzsch by monotypy. No subsequent writer has however so regarded this species. Nevertheless, a strict application of the Règles would result in the transfer of the name Colpocephalum from the group of species that includes Colpocephalum zebra Burmeister, 1838, to the genus now known by the name Actornithophilus Ferris, 1916 (Canad, Ent. 48: 303), the type species of which, Colpocephalum uniseriatum Piaget, 1880 (Pédiculines: 562), is undoubtedly congeneric with Colpocephalum ochraceum Nitzsch, 1818. Not only have the zebra-group and the ochraceum-uniseriatum group borne the names Colpocephalum and Actornithophilus respectively without disturbance since 1916, but both are large groups (Actornithophilus containing about 40 named species and Colpocephalum in the accepted sense a great many more). The confusion that would be caused by the transfer of the name Colpocephalum from the one group to the other would therefore be very great. Moreover, the change so involved would leave five generic names compounded with the word "Colpocephalum" (namely Eucolpocephalum Bedford, 1930 (Rep. vet. Res. S. Afr. 16:161). Neocolpocephalum Ewing, 1933 (J. Parasit. 20:65). Pseudocolpocephalum Qadri, 1936: Z. Prasitenk. 8:640). Allocolpocephalum Qadri, 1939 (Indian J. Ent. 1:66). Corvocolpocephalum Conci, 1942 (Bull. Soc. ent. ital. 74:30)) in a division of the family MENOPONIDAE to which the genus Colpocephalum would no longer belong.

The only way by which disastrous confusion can be avoided in this case is by the International Commission using its plenary powers to designate Colpocephalum zebra Burmeister, 1838, to be the type species of the genus Colpocephalum Nitzsch, 1818. In addition to giving a firm legal foundation for the current use of the generic name Colpocephalum, such a course would remove the danger to which the name Actornithophilus Ferris, 1916, is at present exposed; it would be desirable that this latter name should be placed on the Official List of Generic Names in Zoology at the same time that the name

Colpocephalum Nitzsch, 1818 (with the type species specified above) is stabilised in this way.

#### (c) The type species of "Gyropus" Nitzsch, 1818

When in 1818 (:304) Nitzsch first published the generic name *Gyropus*, he cited under it only (1) *Gyropus ovalis* (a nomen nudum until first published twenty years later with a description by Burmeister in 1838) and (2) *Gyropus gracilis* (an unnecessary nomen novum for *Pediculus porcelli* Schrank, 1781 (*Enum. Ins. Austr. indig.*:500, pl. l, fig. 1). The nominal species *Gyropus gracilis* Nitzsch, 1818, is thus the type species of this genus by monotypy.

Harrison (1916: 22) selected Gyropus ovalis Burmeister, 1838, as the type species of Gyropus Nitzsch, but that action was ultra vires, since (as shown above) Gyropus gracilis Nitzsch, 1818, has been the type species of this genus ever since the generic name Gyropus was first published in 1818. Nevertheless, Harrison's type selection has been universally accepted in all works published since 1916, including Ewing's monograph of the Gyropidae (1934) and Werneck's monograph of the Mallophaga of South American mammals (Werneck, 1936: 419). The latter is a work of high quality which deals with almost all the then known species of GYROPIDAE, but it has recently been superseded by a monograph by the same author of the mammal-infesting Mallophaga of the world ("Os Malófagos de Mamíferos. Parte 1 : Amblycera c Ischnocera (Philopteridae e parte de Trichodectidae)" published at Rio de Janeiro in 1948 in which Gyropus ovalis Burmeister is still regarded as the type species of Gyropus Nitzsch. Under a strict application of the Règles, the name Gyropus Nitzsch would, however, have to be transferred to the genus at present known as Gliricola Mjöberg, 1910 (Zool. Anz. 35: 292) (type species, by original designation: Gyropus gracilis Nitzsch, 1818), and which has been universally accepted ever since. It should be noted, in passing, that the name Gliricola appeared in the January issue of the Zoologischer Anzeiger (on the page noted above) but that later in the same year (11th June) another paper by Mjöberg was published (Ark. Zool. 6 (No. 13): 18) in which the name Gliricola again appeared as a new name, once more with Gyropus gracilis Nitzsch as type species but this time by monotypy instead of (as in the earlier paper) by original designation. The Gliricola Mjöberg of the Ark. Zool. is both an objective synonym, and a junior homonym, of the Gliricola of the Zool. Anz. and, in accordance with the Commission's policy of disposing of invalid names, should now be placed on the Official Index of Rejected and Invalid Generic Names.

In addition to the arguments advanced in the preceding paragraph in favour of giving valid force to Harrison's selection of Gyropus ovalis Burmeister, 1838, as the type species of the genus Gyropus Nitzsch, 1818, it may be noted that since 1910 there have been erected six genera with names compounded of the word "Gyropus" (namely Protogyropus Ewing, 1924 (Proc. U.S. nat. mus. 63 (Art. 20): 7). Macrogyropus Ewing, 1924: 25. Allogyropus Ewing, 1924: 20. Heterogyropus Ewing, 1924: 27. Monogyropus Ewing, 1924: 10. Tetragyropus Ewing, 1924: 21), all of which would cease to be included in the subfamily GYROPINAE, if the change necessitated by the strict application of the Règles were to be made.

The foregoing changes in nomenclatorial usage would cause serious confusion, all the more so because both Gyropus ovalis Burmeister, 1838, and Gliricola porcelli (Schrank, 1781) are parasites of the guinea-pig and, in consequence, are frequently mentioned in the literature of applied entomology. The only way by which these serious results can be avoided is by the International Commission deciding to use its plenary powers to designate Gyropus ovalis Burmeister, 1838, to be the type species of the genus Gyropus Nitzsch, 1818, and to place Gyropus Nitzsch, 1818, on the Official List of Generic Names in Zoology with Gyropus ovalis Burmeister, 1838, as type species. It would be desirable that at the same time the name Gliricola Mjöberg, 1910, which would thus be relieved of the danger which at present threatens it, should also be placed on the Official List of Generic Names in Zoology.

I further ask that, when the foregoing generic name Gyropus Nitzsch, 1818, is placed on the Official List of Generic Names, the trivial name of its type species, namely the trivial name ovalis Burmeister, 1838 (as published in the binominal combination Gyropus ovalis) should be placed on the Official List of Specific Trivial Names. In the case of Gliricola Mjöberg, 1910, it would not be appropriate to place on the foregoing Official List the trivial name of its type species, for (as already explained) the trivial name gracilis Nitzsch, 1818 (as published in the binominal combination Gyropus gracilis) is a junior subjective synonym of the trivial name porcelli Schrank, 1781 (as published in the binominal combination Pediculus porcelli). It is therefore the latter trivial name which should be placed on the Official List. In this connection, it must be noted that the name of the species now universally known as Gliricola porcelli has been commonly, though incorrectly, attributed to Linnaeus, owing to the specific name Pediculus porcelli having been published as a nomen nudum by Linnaeus in 1758 (Syst. Nat. (ed. 10) 1:611) and again in 1767 (ibid (ed. 12) 1 (2):1017). What is required, therefore, is that the trivial name porcelli Schrank, 1781 (as published in the binominal combination *Pediculus porcelli*) should be placed on the Official List of Specific Trivial Names in Zoology and that the nomen nudum porcelli Linnaeus, 1758 (as published in the binominal combination Pediculus porcelli) should be placed on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology. The figure given by Schrank for his Pediculus porcelli is quite reasonably good but it would nevertheless be convenient, if, when citing the name Pediculus porcelli Schrank in the decision on this case, the International Commission were at the same time to state that the nominal species in question is to be interpreted by the description and figures published in 1936 (Mem. Inst. Oswaldo Cruz 31: 397-401, figs. 1-9), by Werneck (by whom however the name of this species was then attributed to Linnaeus). the interpretation so given being the best and most recent that has been published and in complete accord with universal nomenclatorial practice.

#### (d) Conclusions and Recommendations

The considerations set forth in the preceding portions of the present application were put forward by the present applicant in a paper published in 1947, copies of which were distributed to all workers on Mallophaga with whom it was possible to establish contact, together with a request that the recipients should complete and return voting papers on the question whether application

should be made to the International Commission on Zoological Nomenclature for the use of the plenary powers to such extent as might be necessary to ensure the retention of the names *Lipeurus*, *Colpocephalum* and *Gyropus* in the sense in which they are currently used and have been used ever since the genera were divided.

J. Bequaert (Harvard University, Cambridge, Mass., U.S.A.) and J. E. Webb (Aberdeen University, Scotland) voted against such application being made, both explaining in letters accompanying their voting papers, that they were opposed in principle to all suspensions of the Rules in such cases; with one exception, they are the only workers, among those who replied, whose work on Mallophaga has lain wholly outside the field of systematics.

The following voted in favour of application being made to the International Commission on Zoological Nomenclature:—

W. Büttiker (Zurich, Switzerland)

T. Clay (London, England)

W. Eichler (Berlin, Germany)

K. C. Emerson (Stillwater, Oklahoma, U.S.A.)

L. R. Guimarães (São Paulo, Brazil)

G. H. E. Hopkins (Tring, England)

W. L. Jellison (Hamilton, Montana, U.S.A.)

S. v. Kéler (Berlin, Germany)

R. Meinertzhagen (London, England)

E. O'Mahony (Dublin, Eire)

G. B. Thompson (Kingston, Jamaica)

F. L. Werneck (Rio de Janeiro, Brazil)

It seems worth emphasing that it would be useless to attempt to give a comprehensive list of the works in which the generic names under consideration have been used in the sense in which it is sought to retain them, because such a list would include every occasion on which these names have been used since the invalid selections of type species for them were made. No author has ever used any of these names in a published work in the sense in which the strict application of the *Règles* would require that they should be used.

For the reasons set forth in the present application, the International Commission on Zoological Nomenclature is requested:—

(1) to use its plenary powers to set aside all indications or selections of type species for the under-mentioned nominal genera made prior to the decision now proposed to be taken, and, having done so, to designate as the type species of those genera the nominal species specified below:—

Name of genus

Species recommended to be designated as the type species of the genus specified in Col. (1)

(1) Lipeurus Nitzsch, 1818 (2)
Pediculus caponis Linnaeus, 1758
(as defined by Clay, 1938)

Name of genus

Species recommended to be designated
as the type species of the genus specified
in Col. (1)

(2)

Colpocephalum Nitzsch, 1818 Gyropus Nitzsch, 1818

(1)

Colpocephalum zebra Burmeister, 1818 Gyropus ovalis Burmeister, 1818

- (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
  - (a) the three generic names specified in (1) above, with the species there specified in Col. (2) as their respective type species;
  - (b) Actornithophilus Ferris, 1916 (type species, by original designation: Colpocephalum uniseriatum Piaget, 1880 (Pédiculines: 562, pl. 47, fig. 2);
  - (c) Gliricola Mjöberg, 1910 (type species, by monotypy: Gyropus gracilis Nitzsch, 1818);
- (3) to place the under-mentioned trivial names on the Official List of Specific Trivial Names in Zoology:—
  - (a) caponis Linnaeus, 1758 (as published in the binominal combination *Pediculus caponis*), as defined in Col. (2) of (1) above (trivial name of type species of *Lipeurus* Nitzsch, 1818);
  - (b) ovalis Burmeister, 1838 (as published in the binominal combination Gyropus ovalis) (trivial name of type species of Gyropus Nitzsch, 1818);
  - (c) porcelli Schrank, 1781 (as published in the binominal combination *Pediculus porcelli*) (as defined in 1936 by Werneck (by whom the name was attributed to Linnaeus));
  - (d) uniseriatum Piaget, 1880 (as published in the binominal combination Colpocephalum uniseriatum) (trivial name of type species of Actornithophilus Ferris, 1916);
  - (e) zebra Burmeister, 1838 (as published in the binominal combination Colpocephalum zebra) (trivial name of type species of Colpocephalum Nitzsch, 1818.
- (4) to place the under-mentioned names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
  - (a) Gliricola Mjöberg, June 1910 (an objective synonym, and junior homonym, of Gliricola Mjöberg, January 1910);
  - (b) Liperus Kellogg, 1902 (an invalid emendation of Lipeurus Nitzsch, 1818);
- (5) to place the trivial name porcelli Linnaeus, 1758 (as published in the binominal combination Pediculus porcelli) (a nomen nudum) on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology.

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A TYPE SPECIES FOR THE GENUS "EUREUM" NITZSCH, 1818 (CLASS INSECTA, ORDER MALLOPHAGA) IN HARMONY WITH CURRENT NOMENCLATORIAL PRACTICE

By G. H. E. HOPKINS, O.B.E., M.A.

(British Museum (Natural History), Zoological Museum, Tring, Herts)

#### (Commission's reference Z.N.(S.) 532)

The object of the present application is to ask the International Commission on Zoological Nomenclature to give a ruling, if necessary under the plenary powers, that Eureum cimicoides Burmeister, 1838 (Handb. Ent. 2 441) is the type species of the genus Eureum Nitzsch, 1818 (in Germar's Mag. Ent. 3:301), in order to prevent the serious confusion which would arise if, as has been argued by Eichler, it were necessary under the Règles to accept Eureum malleum Burmeister, 1838 (loc. cit. 2:441) as the type species of this genus. The facts of this case are set out in the following paragraphs.

In 1818 (: 301) Nitzsch published the generic name Eureum; he gave an indication for this name, thereby making it available under the Article 25, but he cited under it only two nomina nuda, namely Eureum cimicoides and Eureum malleum. This nominal genus is thus one established without any included nominal species. Accordingly, up to 1948 it would have been necessary to apply the ruling given in *Opinion* 46 in order to determine what is the type species of this genus. Fortunately, however it is no longer necessary to attempt this difficult operation, for in 1948 the International Congress of Zoology (on the advice of the International Commission) substituted clear and self-consistent provisions for the, in part, self-contradictory ruling given in the foregoing Opinion (see 1950, Bull. 2001. Nomencl. 4: 159-160, 346). Under this ruling, we have first to ascertain when this generic name was first subsequently used by an author who cited under it nominal species, the names of which had been validly published with an indication, definition or description, the nominal species so cited being, under the foregoing ruling by the Congress the only species to be treated as being originally included species and therefore, where more than one such species is so cited, as the only species eligible to be selected by a later author as the type species of this genus.

The first occasion on which any validly described nominal species were clearly referred to the genus Eureum Nitzsch, 1818, was in 1838, when Burmeister (2:441) published descriptions of two nominal species, Eureum cimicoides and Eureum malleum (using, it will be noted, the two specific names cited as nomina nuda in 1818 by Nitzsch, whose material was before Burmeister when he published these descriptions). Under the Paris decision quoted above, these two nominal species alone are eligible for selection as the type species of Eureum Nitzsch, 1818.

In 1911 Johnston & Harrison (*Proc. linn. Soc. N.S.W.* **36**: 321–328) selected type species for a number of genera of the Order Mallophaga; in the list given

in their paper they placed an asterisk against the name of each genus, the type species of which they regarded themselves as having selected on this occasion. Of the genus *Eureum*, against the name of which no asterisk was placed, these authors wrote:—" *Eureum* N. is included by Neumann in his list of genera, though Kellogg (1899, p. 133) has shown it to be based on immature forms of a *Menopon*. The latter author has studied *E. malleus* N. (=*E. malleum*) which, being the better known of Nitzsch's two species, may be taken as the type."

Five years later Harrison (1916, Parasitology 9: 21) listed what he called "Eureum cimicoides Nitzsch" (i.e. Eureum cimicoides Burmeister, 1838) as the type species of the genus Eureum Nitzsch; in the body of the same paper (:62) Harrison attributed this species to "Nitzsch in Burmeister". In making the foregoing statement regarding the type species of this genus, Harrison must either have considered that he and Johnston had not selected Eureum malleum Burmeister as the type species in 1911 or have forgotten the action then taken or have decided to ignore it.

Subject to the single exception noted below, all subsequent authors have accepted *Eureum cimicoides* Burmeister as having been validly selected as the type species of *Eureum* Nitzsch, 1818, by Harrison in 1916. It may be noted also that all authors subsequent to Harrison have considered *E. cimicoides* Burmeister and *E. malleum* Burmeister as not being congeneric with one another.

On page 20 of an undated instalment (probably distributed in 1946) of his multigraphed paper "Phthiraptera Mundi Catalogus" (the status of which, from the point of view of qualifying as having been duly published within the meaning of Article 25 (see 1950, Bull. zool. Nomencl. 4: 215-221) must at present be regarded as doubtful) Dr. Eichler took the view that the action taken by Johnston & Harrison in 1911 (in the passage already quoted) constitutes a valid selection by those authors of Eureum malleum Burmeister as the type species of the genus Eureum Nitzsch, 1818, and therefore that it was not open to Harrison in 1916 to select another species (Eureum cimicoides Burmeister) as the type species of this genus. Dr. Eichler accordingly transferred the name Eureum Nitzsch to the genus in which Eureum malleum Burmeister is now placed, sinking, as a synonym, the generic name Hirundoecus Ewing, 1930 (Proc. U.S. nat. Mus. 77 (No. 20): 12), by which that species is now habitually known. At the same time Dr. Eichler established a new nominal genus (:5) to which he gave the name Arndtiella and for which he designated Eureum cimicoides "Ntz. i. Brm." (i.e. Eureum cimicoides Burmeister, 1838) as the type species. About two years later—in 1948—Dr. Eichler again used the name Arndtiella (Naturvissenschaftlichen Rundschau 1948 (2): 31), of which he then stated that the type species was "Eureum cimicoides Nitzsch in Burmeister". Thus, according to Dr. Eichler's view, the generic name Arndtiella Eichler should in future be used for the genus universally known by the name Eureum Nitzsch.

Hitherto I have taken the view that, under Rule (g) in Article 30, "rigidly construed" (as required by that Article), Johnston & Harrison (1911) did not select *Eureum malleum* Burmeister as the type species of *Eureum* Nitzsch, and I have felt confirmed in this view by reason of the fact that in this paper Johnston

& Harrison did not place an asterisk against the name Eureum Nitzsch, as they did against the generic names included in that paper, for which on that occasion they selected type species. I have now seen the decision taken by the Thirteenth International Congress of Zoology in 1948 (on the recommendation of the International Commission) published last year (1950, Bull. zool. Nomencl. 4: 181-182) that "an author is to be treated as having selected a given originally included nominal species to be the type species of the nominal genus concerned . . . provided in such a case the author concerned makes it clear that he himself accepts, for whatever reason, the species in question as the type species of the genus concerned." I recognise that the object of the foregoing provision was to give valid force to the very large number of currently accepted type selections which rest (as the papers in which they were published show) not upon a definite act of selection by the author concerned but upon a definite statement by that author that the species in question is the type species of the genus under consideration. But this decision by the Paris Congress in no way affects my opinion that Johnston & Harrison (1911) did not make any selection of a type species for Eureum Nitzsch, 1818. The phrase "may be taken as the type" to my mind definitely implies that it also may not be taken as the type, and is in no way the same as "is the type", and there is nowhere in Johnston and Harrison's paper a definite statement that any nominal species " is the type " of the nominal genus Eureum. However, as others may take a different view (as, indeed, Dr. Eichler has done) I am assuming for the purpose of this application that Johnston and Harrison did make a valid selection of a type for Eureum Nitzsch, 1818.

As already explained the acceptance of E. malleum Burmeister as the type species of Eureum Nitzsch, 1818, would overthrow the universal practice of all specialists in this group (except Dr. Eichler) and would give rise to totally unnecessary confusion and name-changing, involving, as it would, the transfer of the generic name Eureum Nitzsch, 1818, from the genus containing the species Eureum cimicoides Burmeister, 1838, to the genus to which the species Eureum malleum Burmeister, 1838, is referred by all authors, other than Dr. Eichler. In taking his action, Dr. Eichler applied to this latter genus the name Hirundoecus Ewing, 1930 (Proc. U.S. nat. Mus. 77 (No. 2843): 12)(type species, by original designation: Hirundoecus americanus Ewing, 1930, ibid. 77 (No. 2843): 12). In connection with this genus, it may at this point be noted that many authors (of whom I am one) do not consider that on taxonomic grounds the nominal genus Hirundoecus Ewing, 1930, is separable from Machaerilaemus Harrison, 1915 (Parasitology 7: 389), the type species of which is, by original designation, Machaerilaemus latifrons Harrison, 1915 (ibid. 7: 390).

In order to avoid the serious consequences indicated above, I accordingly now ask the International Commission on Zoological Nomenclature:—

- (1) to use its plenary powers:-
  - (a) to set aside all type selections for the genus *Eureum* Nitzsch, 1818, made prior to the decision now proposed to be given;
  - (b) to designate Eureum cimicoides Burmeister, 1838, to be the type species of the foregoing genus;

- (2) to place the undermentioned generic names on the Official List of Generic Names in Zoology:—
  - (a) Eureum Burmeister, 1818 (type species, by designation, as proposed under (1) (a) above, under the plenary powers: Eureum cimicoides Burmeister, 1838);
  - (b) Hirundoecus Ewing, 1930 (type species, by original designation: Hirundoecus americanus Ewing, 1930) (for use by those specialists who regard the type species of this genus as not being congeneric with Machaerilaemus latifrons Harrison, 1915, the type species of Machaerilaemus Harrison 1915);
  - (c) Machaerilaemus Harrison, 1915 (type species, by original designation: Machaerilaemus latifrons Harrison, 1915);
- (3) to place the undermentioned trivial names on the Official List of Specific Trivial Names in Zoology:
  - (a) cimicoides Burmeister, 1838 (as published in the binominal combination Eureum cimicoides) (trivial name of type species of Eureum Nitzsch, 1818);
  - (b) malleum Burmeister, 1838 (as published in the binominal combination Eureum malleum);
  - (c) americanus Ewing, 1930 (as published in the binominal combination *Hirundoecus americanus*) (trivial name of type species of *Hirundoecus* Ewing, 1930);
  - (d) latifrons Harrison, 1915 (as published in the binominal combination Machaerilaemus latifrons);
- (4) to place the undermentioned generic names or reputed generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
  - (a) Arndtiella Eichler, 1946 (a name which, if validly published, is an objective synonym of Eureum Nitzsch, 1818, as proposed, under (1) (b) to be defined under the plenary powers);
  - (b) Arndtiella Eichler, 1948 (an objective synonym of Eureum Nitzsch, 1818, as proposed, under (1) (b) above, to be defined under the plenary powers);

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#### Inquiries

All inquiries regarding publications should be addressed to the International Trust for Zoological Nomenclature, and all inquiries regarding the scientific work of the International Commission on Zoological Nomenclature to the Secretary to the Commission at the following addresses:—

International Trust for Zoological Nomenclature: 41, Queen's Gate, London, S.W.7, England.

International Commission on Zoological Nomenclature: Secretariat of the Commission, 28 Park Village East, Regent's Park, London, N.W.1, England.